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AUTHOR	Jones, Brenda J.; Meiners, Mark R.
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ABSTRACT

With improvements in medical technology and an increase in life expectancy, there also has been a substantial increase in the number of individuals with chronic diseases. The chronically ill elderly, who absorb an ever-growing proportion of our public and private resources, are of particular concern. This study analyzes findings from a major demonstration and evaluation project which studied the consequences of using incentive payments to change admission and outcome patterns for Medicaid patients in nursing homes. Incentive payments were provided to encourage nursing homes to admit highly dependent Medicaid residents, to improve the nature of nursing home care by setting goals, and to encourage more appropriate discharges by encouraging institutions to provide case management service. The experiment was carried out in 36 proprietary, Medicaid-certified, skilled nursing homes in San Diego County, California, with a combined Medicaid inpatient census of about 3,600 residents. Homes were divided into control and treatment groups. Incentive payments offered to the treatment group were designed to achieve study objectives. Results of the discharge-incentive payments could not be clearly described in terms of success or failure. A high percentage of those with discharge plans were successfully discharged to a lower level of care. However, the facilities that participated tended to discharge to lower level of care institutional settings. The incentive payment system appeared to result in some facilities finding ways to overcome discharge barriers. (ABL)

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NCHSR

Health Care for the Aging

Nursing Home Discharges: The Results of an Incentive Reimbursement Experiment

CG 019376

Long-Term Care Studies Program
Research Report

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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Background

Brenda J. Jones, M.A., is a social science analyst with the Health Services for the Aged Studies Program of the NCHSR Division of Intramural Research. **Mark R. Meiners**, Ph.D., a health economist, is Senior Research Manager of the Long-Term Care Studies Program of that division.

Additional information on the intramural research program is available from the National Center for Health Services Research and Health Care Technology Assessment, 3-50 Park Building, Rockville, MD 20857; 301/443-2560. Inquiries may be directed to the Health Services for the Aged Studies Program or to the Long-Term Care Studies Program.

Copies of NCHSR publications are available from the NCHSR Publications and Information Branch, 1-46 Park Building, Rockville, MD 20857; 301/443-4100.

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The 824-page documentation report of Applied Management Sciences, Inc. (see reference 8), may be ordered from the National Technical Information Service, Springfield, VA 22161 (703/487-4650), as PB86-225554. The study data on magnetic tape are available from NTIS in three parts, each of which includes the documentation report. These are: **resident materials**, PB86-225547; **facility materials**, PB86-225562; and **study materials**, PB86-225570. Check prices before ordering.

Health Care for the Aging Research Reports present findings from studies conducted by the Long-Term Care Studies Program and the Health Services for the Aged Studies Program, components of the Division of Intramural Research, National Center for Health Services Research and Health Care Technology Assessment (NCHSR). This series presents information useful to those making administrative or policy decisions on matters related to long-term care or the general problem of health care for the elderly.

Overview

With improvements in medical technology and an increase in life expectancy, there also has been a substantial increase in the number of individuals with chronic diseases. Policy research now being conducted by the NCHSR intramural research program is concerned with defining the dimensions of the problems of caring for the chronically ill and identifying various approaches to organizing, financing, and delivering acute and long-term care services. The chronically ill elderly, who absorb an ever-growing proportion of our public and private resources, are of particular concern.

The intramural research program is concerned specifically with such problems as:

- the size and sources of our expenditures for long-term care
- the feasibility of alternative financing and reimbursement strategies
- the factors that affect the demand for and use of long-term care services
- the types of care that might be required for particular levels of functional disability
- the cost and economic implications of informal support systems
- the organization and coordination of social and medical services
- the economic and social implications of alternative health care and living arrangements.

This research report presents findings from a major demonstration and evaluation project which studied the consequences of using incentive payments to change admission, discharge and outcome patterns for Medicaid patients in nursing homes. In this experiment incentive payments were provided:

- to encourage nursing homes to admit highly dependent Medicaid residents who might otherwise be hospitalized inappropriately
- to improve the nature of the care provided by the nursing home by setting target outcome goals for specific patients and by establishing formal treatment plans for achieving these goals
- to encourage more appropriate discharges by encouraging institutions to provide case-management services, and by paying additional sums in situations in which discharge resulted from improved care.

An incentive-payment system was developed to reward facilities for achieving the various admission, treatment and discharge objectives. The experiment was carried out in 36 proprietary, Medicaid-certified, skilled nursing homes in San Diego County. These nursing homes had a combined Medicaid inpatient census of about 3,600 residents. The experiment lasted 30 months. The first six months (November 1980 through April 1981) provided baseline data on the nursing homes, their residents, and their methods of operation. Homes were subsequently assigned to either a control group or a treatment group. During the next two years (May 1981 through April 1983) an incentive reimbursement system was employed in paying for care in nursing homes included in the treatment group.

Data collecting, training and supervising a local field team of qualified geriatric nurses, and disbursing incentive payments to the nursing homes were the responsibilities of Applied Management Sciences, Inc. (funded by contract OASH 233-79-3019). All participating nursing homes were required to sign subcontracts with the contractor guaranteeing provision of data and accepting the incentive reimbursement system as well as judgments made by the local field team on authorization for payment to the treatment homes.

Admission, discharge, assessment, goal setting and care planning of residents remained the responsibility of the

nursing homes. The contractor's local field team authorized:

1. Incentive payments on behalf of Medicaid residents according to the study's resident-classification system,
2. Outcome-incentive payments for eligible residents who successfully achieved previously approved care goals, and
3. Discharge-incentive payments on behalf of residents who were discharged and maintained at lower levels of care for at least 90 days.

The incentive-payment system was designed to achieve each of the study's objectives; that is, an admission incentive was paid to encourage homes to admit sicker Medicaid residents who required above average care; an outcome incentive was paid to encourage homes to expand their nursing care services; and a discharge incentive was paid to encourage appropriate discharges and to provide case-management services.

The reimbursement system adhered to a number of basic principles:

1. All incentive payments were paid in addition to the Medicaid reimbursement.
2. Current Medicaid residents as well as new Medicaid admissions (or residents converting to Medicaid) were eligible for incentive payments.
3. Admission-incentive payments were paid on a monthly basis, outcome-incentive payments were paid on a quarterly basis, and discharge-incentive payments were prorated on a monthly basis following discharge.
4. Admission-incentive payments were paid on a prorated basis for residents who died or were transferred to a hospital because of an unavoidable change in health status.
5. The amount of the admission-incentive payment was not decreased as the resident improved; an increase was effective for the quarter following an unavoidable decline in health status.
6. Admission-incentive payments continued for three years beyond the end of the demonstration period for residents admitted during the first year of the treatment period.

The admission-incentive payments were computed based on the mean time per patient day required for each nursing care activity. This mean time was linked with a composite wage, which was weighted by the skill mix of nursing home staff delivering the care of service, to arrive at the mean nursing costs. The payments were designed to compensate for the costs of heavy-care patients which exceeded the amount paid by Medicaid.

The computation of the outcome-incentive payment was based on:

1. The basic services required in order to achieve the goal
2. The mean time required to perform the services
3. The skill mix of nursing personnel involved in service delivery and their composite hourly wage, and
4. The average number of days needed to achieve the goal.

The discharge-incentive payment rates include two components, vacant beds and staff effort. Since the vacant bed costs varied by a facility's bed capacity, two discharge-incentive rates were set based on the Medicaid SNF-bed rates that went into effect at the time of the study. The incentive payment covered up to 10 days of vacant bed cost for a timely discharge. The staff effort component of the incentive payment was intended to cover the cost of discharge planning, coordinating, and follow-up.

This report presents the results of the discharge-incentive component of the study. Other reports in this series will provide data and analysis on other aspects of the research project.

Nursing Home Discharges: The Results of an Incentive Reimbursement Experiment

Brenda J. Jones and Mark R. Meiners

Interest in discharge planning is on the rise, stimulated by the implementation of the new Medicare prospective payment system for hospitals *(1)*. Under that system's incentives, discharge planning has great potential for producing financial rewards for hospitals *(2)*. Currently no similar incentives exist for nursing homes.

Although discharge plans are mandated by Federal regulations for Medicare and Medicaid patients in nursing homes, plans are usually prepared to accomplish a "paper compliance," with little effort made to implement them *(3)*. This is less of a problem with Medicare patients in nursing homes because they tend to be admitted for post-acute skilled nursing and rehabilitation, usually requiring a short stay. However, under Medicaid, the primary payor for nursing home care, the problem is significant.

Because it is the payor of last resort after Medicare and private resources are exhausted, Medicaid is the primary source of support for patients with long nursing home stays. Many Medicaid patients are not considered candidates for discharge because they do not have the family or other social support necessary for successful community placement. Their financial resources are limited, and current financial assistance programs are institutionally biased. Community resources, such as adult foster homes, group homes, and boarding homes, receive only limited support. In addition, discharge planning and its implementation in nursing homes currently are not reimbursed under Medicare or Medicaid, which provide no other incentives to discharge to a lower level of care. The result is that both patients and staff members are oriented to think only in terms of institutional care.

When patients are inappropriately maintained in skilled nursing home beds they limit access for other patients needing that level of nursing care. Often the patients remaining in the more expensive acute care beds are public-pay patients, particularly those requiring heavy care. The lack of incentives for discharge planning and implementation has significant adverse implications for public payors.

This report describes the results of an experiment designed to encourage nursing homes to carry out appropriate discharges by providing them financial incentives. The demonstration project was undertaken by the National Center for Health Services Research and Health Care Technology Assessment (NCHSR) with the cooperation of the Health Care Financing Administration. The discharge component of the experiment is part of a larger study that also included incentive reimbursements to encourage nursing homes to admit heavy-care Medicaid patients and to set and achieve patient outcome goals. Further information on the design, implementation, and results of these and other aspects of the experiment is contained in other reports *(4-8)*.

Background

The NCHSR demonstration was conducted in 36 proprietary, Medicaid-certified skilled nursing homes in the San Diego Standard Metropolitan Statistical Area (SMSA). (The Medicaid program in California is called MediCal. In this report we use the more general term, Medicaid, when referring to the patients paid for by that program.) The demonstration was in effect for a period of 30 months (November 1980 through April 1983). The first six months, November 1980 through April 1981, were used to collect baseline data on the participating nursing homes, their residents, and their operations. At the end of the baseline period, the homes were randomly assigned to either a control group or an experimental group. During the next two years, May 1981 through April 1983, the 18 experimental facilities operated under the terms of the incentive reimbursement system.

The intent of the discharge-incentive payment was to promote the appropriate placement of nursing home residents in lower level care settings. These include intermediate care facilities (ICF), board and care facilities, private homes, and other community settings where necessary care is provided. Medicaid residents who appeared to be dischargeable within 90 days after admission were not included in the study. The research team nurses judged that these patients required only minimal care, or short-term institutionalization, and therefore could and most likely would be easily discharged without the intervention of the incentive payment. Patients who were eligible for the discharge goal fell into one of two categories: those requiring moderate to heavy care upon admission, and who could not be discharged within 90 days; and those dischargeable under Medicaid criteria, but who had to overcome social, psychological, financial, or functional barriers before their placement in a lower level of care environment could be made.

The discharge-incentive payment rates were established to reflect two components—vacant bed

Exhibit 1. Schedule of patient discharge incentive payments, by facility size and number of days following planned date of discharge (NCHSR Nursing Home Incentive Reimbursement Study).

Discharge goal	Vacant bed cost	+	Staff effort cost	=	Total payment
Bed size 1-59					
Within 5 days	378.10		288.40		666.50
Within 15 days	189.05		230.40		419.45
Within 30 days	75.62		165.83		241.45
More than 30 days	0.00		165.83		165.83
Bed size 60-299					
Within 5 days	352.60		288.40		641.00
Within 15 days	176.30		230.40		406.70
Within 30 days	70.62		165.83		236.35
More than 30 days	0.00		165.83		165.83

costs and staff effort. Since vacant bed costs vary according to a facility's bed capacity, two discharge-incentive rates were set based on the Medicaid special nursing facility bed rates that were in effect during the study. The incentive payment covered up to 10 days of vacant bed costs for a timely discharge. The staff-effort component of the incentive payment was intended to cover the cost of up to 40 hours of nurse time for discharge planning, coordinating, and follow up.

Full reimbursement for these components was made only in the case of those discharged within 5 days of the planned date. Discharges which were not within 5 days resulted in reduced incentive payments for both the vacant bed costs and the staff-effort components as described below. The discharge-incentive payment schedule is shown in Exhibit 1. Payments were made only for patients for whom discharge plans were established and approved, who were discharged to a lower level of care, and who remained in a lower level care setting for at least 90 days.

As with all the incentive components of the reimbursement system, the decision to participate in the discharge goal process was left to the nursing home staff. Only those Medicaid patients who agreed to be part of the study and who were in an experimental facility at the start of the treatment period (May 1, 1981), or who were admitted to an experimental facility during the treatment period (May 1, 1981 through April 30, 1982) were eligible for the discharge goal. Patients were eligible to be nominated for the discharge goal for up to one year following their admission to the study.

Discharge training

Shortly after the treatment period began, representatives of the facilities in the experimental group were invited to attend a workshop on discharge planning. The purpose was to provide some guidelines to the facilities for developing discharge plans and for placing residents in the community. A discharge planning protocol was distributed for further study and future reference (8). The workshop also was used to familiarize the facility staff members with the forms and procedures to be used in the discharge process. The meeting was attended by administrators of the treatment homes and their designated discharge planners.

In addition to this one-time opportunity for formal training, the research team nurses conducted informal, in-service training sessions in all experimental facilities during the first two months of the treatment period. Training included assisting the facility staff in understanding the criteria for identifying a dischargeable patient, implementing the discharge planning process, explaining the required paperwork and procedures, and identifying some of the available options and resources. After the first two months of the treatment period, the research team nurses were allowed only to "suggest" potentially dischargeable residents. The facility staff was responsible for deciding whether or not the discharge goal would be set and what would be involved in developing the discharge plan.

Discharge goal process

If a facility in the experimental group decided to set a discharge goal, a form was completed by staff members that served as a basis for evaluating the patient's potential ability to perform selected adaptive tasks (for example, transportation assistance, or self-administration of medications), the patient's capacity to meet physical needs of daily living (such as dressing), and the potential for the patient's medical needs to be satisfied by such means as monitoring by licensed nurses. At the conclusion of this evaluation, the facility staff had to decide if the resident could be linked with services in a lower level of care setting which would adequately meet his or her needs. The form also served as a mechanism to notify the research team nurses to schedule an appointment to review the facility's discharge plan. For residents admitted prior to the baseline period, who were not being assessed regularly, the research team nurses would review the patient's record to verify that the patient should have been nominated for the discharge goal.

In order for the research team nurses to approve the discharge, the facility had to arrange for all of the requisite services prior to the date of discharge, and document the date services would begin, including the agency's or caregivers' names and telephone numbers. Additionally, the facility had to specify the type of placement (such as board and care, or intermediate care facility) and the address, so that the research team nurse could conduct follow-up visits subsequent to the resident's discharge.

Each facility was responsible for designating a person to act as its discharge coordinator. The discharge coordinator was required to conduct follow-up visits each week during the first month, and biweekly visits during the second and third months to assess the provision of services and support provided the discharged resident. The discharge plan had to appear to have a reasonable chance of successful implementation, and the patient or the person legally authorized to act for the patient had to agree to the plan.

Following discharge, a research team nurse visited the resident in his or her discharge setting. These visits were accomplished 30, 60, and 90 days after discharge from the nursing facility. During these visits, the research team nurse assessed whether the discharge plan was being implemented as prescribed. If it was determined that the resident's needs were being met, the research team nurse authorized an incremental discharge payment to be paid to the facility. If the discharge was not being implemented as prescribed, or if the resident required additional services, the research team nurse could refuse to authorize payment and would specify what actions were to be taken. Once the patient had been in the lower level setting for 90 days, the case was considered closed and the discharge was certified as successful. If a patient was unable to remain at the lower level for 90 days, any incremental payments were foregone.

Results

With regard to discharge goal achievement, comparisons between the experimental and control facilities are limited because there was no comparable discharge planning process in control facilities, and the study did not track control facility patients to determine whether they remained in the community for 90 days after discharge.

Irrespective of these constraints, useful comparisons between experimental and control facilities are possible. Of those patients who were expected to remain in the facility 90 days or more after the start of the demonstration, and who consented to participate, 13.7 percent (128 patients) in experimental facilities were nominated by facility staff as possible candidates for the discharge goal, while 14.9 percent (137 patients) in control facilities were nominated by research team nurses as hypothetical candidates for discharge goals. Of those patients nominated who were later assessed to determine their discharge status, 43.7 percent (46 patients) in the experimental facilities were discharged to a lower level of care compared to 22.7 percent (30 patients) in the control facilities.

These results suggest that the discharge-incentive payment did little to encourage the experimental facilities to identify their patients for possible discharge, but that the incentive payment did increase the likelihood of the experimental facilities following through on placing appropriate discharge candidates in a lower level of care. Beyond these comparisons, the assessment of the discharge-incentive payment system must be confined to the response of the experimental facilities.

Discharge plans for 48 patients were submitted to the research team nurses. Of the 48 discharge plans, 47 were approved. One was disapproved because family support was lacking. One patient with an approved plan died before the discharge could be im-

Table 1. Adaptive tasks and the numbers of patients at the level of assistance required with that task, as identified by the discharge plans (NCHSR Nursing Home Incentive Reimbursement Study).

Tasks	Independent or not applicable	Mechanical help	Human help	Human and mechanical help	Totally dependent
Transportation	10	7	18	9	4
Shopping	14	2	19	7	6
Stairs	17	7	11	3	10
Medicine	25	1	14	0	8
Telephone	26	3	13	1	5
Chores	28	0	8	5	7
Laundry	31	0	7	2	8
Money	31	1	10	0	6
Grooming	32	1	12	1	2
Meals	35	0	4	2	7
Possessions	36	0	9	1	2

Independent: Resident can complete activity without human help or supervison; *or* not applicable for proposed discharge placement.

Mechanical help: Resident can complete activity without human help or supervision, but requires some mechanical help (independent, with mechanical assistance).

Human help: Resident receives some human help or supervision; may be able to complete light activity, but requires assistance with heavy or harder aspects.

Human and mechanical help: Resident receives some human help or supervision and requires some mechanical help to complete activity; may be able to complete light activity, but requires assistance with heavy or harder aspects.

Totally dependent: Resident cannot do activity; activity is done totally for the resident (dependent).

plemented. The types and levels of assistance needed with adaptive tasks are shown in Table 1. The most frequently needed adaptive tasks identified in the discharge plans were assistance with transportation (79 percent), shopping (71 percent), and climbing stairs (65 percent). Generally, the type of assistance most often needed was human help or supervision on a limited basis without mechanical aids.

As shown in Table 2, the number of services prescribed in the 48 plans ranged from only one service (16 plans) to nine services (5 plans). The types of services and the service providers identified in the plans are shown in Table 3. Nearly every plan (45 plans) made provisions for medical services. Custodial equipment was the next most frequently planned service-related item (17 plans), followed by nursing services and personal care services (14 plans). In most cases the provider was a paid institution or professional service. The services were almost always scheduled on an as-needed basis.

The 48 patients for whom discharge plans were prepared constituted only 37.5 percent of those nominated and 42.5 percent of those approved for the discharge goal process (Table 4). It appears that the preparation of the plan was a major barrier to the discharge process. Only half of the experimental facilities prepared discharge plans. Two of these facilities accounted for two-thirds of those plans.

Of the 46 patients discharged under an approved plan, 33 (72 percent) were successfully discharged to a lower level of care for at least 90 days. Most of the

Table 2. Frequency distribution of numbers of services prescribed in discharge plans (NCHSR Nursing Home Incentive Reimbursement Study).

Number of services prescribed	Number of discharge plans	Percent of discharge plans
1	16	33.3
2	9	18.8
3	2	4.2
4	6	12.5
5	2	4.2
6	2	4.2
7	2	4.2
8	4	8.4
9	6	12.5
Total	48	100.0

Table 3. Services required and numbers of patients requiring the service, by type of service provider, as identified by the discharge plans (NCHSR Nursing Home Incentive Reimbursement Study).

	Total	Paid institution	Professional service	Family or others resp.	Paid helper	Free community private	Free community government
Medical	45	17	16	6	3	2	1
Custodial equipment	17	9	4	2	1	1	—
Nursing	14	7	4	—	3	—	—
Personal care services	14	8	3	—	2	1	—
Eye care	10	5	3	1	—	1	—
Food provision/ preparation	10	7	2	—	1	—	—
Transportation	10	2	6	1	1	—	—
Podiatry	7	3	2	1	—	1	—
Dental care	6	3	1	1	—	1	—
X-ray and lab	5	2	1	1	—	1	—
Homemaker/ home aide	5	1	1	—	3	—	—
Behavior supervisions check	5	2	—	1	1	1	—
Financial assistance	5	1	2	1	1	—	—
Telephone reassurance	5	—	4	—	1	—	—
Nutrition services	4	3	—	—	—	1	—
Housekeeper/ chore services	4	1	1	—	2	—	—
Mental health	3	1	1	—	1	—	—
Other ancillary health	3	1	2	—	—	—	—
Special equipment	3	1	—	—	1	1	—
I & R coordination	3	—	1	2	—	—	—
Physical therapy	3	1	—	—	2	—	—
Speech therapy	1	—	—	—	1	—	—
Adult day care	1	1	—	—	—	—	—
Advocacy service	1	—	—	—	1	—	—
Protective services	1	—	—	—	—	—	1

patients with an unsuccessful discharge suffered a decline in health status and were returned to the nursing home or required acute care. For example, two patients died shortly after discharge; one patient who was discharged to a board and care facility fell and required hospitalization; another patient had problems with the family providing the necessary care the patient needed.

Among the successful discharges was a patient who was incontinent, was not ambulatory, required tube feeding, and who was discharged to family care. The family was trained and in fact provided excellent nursing care. The patient was subsequently weaned from the tube. Another patient, who was admitted to a facility and who had no prior lower level care residence, was found an apartment. The

Table 4. Results of discharge-goal process in treatment facilities (NCHSR Nursing Home Incentive Reimbursement Study).

Discharge goal nominated	128
Discharge goal approved	113
Discharge plan submitted	48
Discharged according to plan	46
Remained at lower level of care for 90 days	33
Percent nominated who were discharged according to plan	35.9
Percent approved who were discharged according to plan	40.7
Percent discharged according to plan who remained at lower level of care for 90 days	71.1

apartment owner accepted the patient although he required additional financial assistance. There were two cases in which the residents were placed in board and care homes and subsequently were taken home by their families.

The 72 percent success rate is quite good. It suggests that those few facilities that did the required discharge planning and follow up had a reasonably good expectation of success. The patient's length of stay was a major factor in determining the success rate. For patients whose length of stay was less than a year, 79.3 percent were successful compared to 52.6 percent of those patients in the nursing home for a year or more. About 88 percent of those discharged successfully had been in the nursing home for 90 days or more; 30 percent had been there a year or more (Table 5).

It is clear, however, that "discharged to a lower level of care" meant going home for only a minority. As is implied in the discharge plan service and provider configurations described earlier (Table 3), the discharge-incentive system resulted in participating facilities discharging patients to a lower level institutional setting, rather than deinstitutionalizing them. More than 70 percent of those successfully discharged went either to an intermediate care facility or a board and care facility (Table 6).

Table 5. Nursing home length of stay for patients successfully discharged (NCHSR Nursing Home Incentive Reimbursement Study).

	Percent (N=33)
Less than 90 days	12.1
More than 90 days and less than 1 year	57.6
One year or more	30.3

Table 6. Distribution of patients who achieved discharge goal, by living arrangement (NCHSR Nursing Home Incentive Reimbursement Study).

	Percent (N=33)
Private home	28.2
as paying guest	(9.4)
other	(18.8)
Board and care facility	34.3
Intermediate care facility	37.5

Participating experimental facilities earned a total of $21,614 for their discharge efforts, an average of $655 per successful discharge. All but two of the successful discharges occurred on or before the planned discharge date.

Summary discussion

The results of the discharge-incentive payments cannot be clearly described in terms of success or failure. A high percentage of those with discharge plans were successfully discharged to a lower level of care. Many of those patients had been in a nursing home for an extended stay. However, the participation in this aspect of the study was quite limited. The facilities that participated tended to discharge to lower level of care institutional settings.

The comments collected from the research team nurses following the completion of the study suggest conflicting interpretations. Generally, they believed that, while the discharge planners accepted responsibility for developing and implementing discharge plans, little effort was expended on the process as a whole. Discharge plans were generally very simplistic and not creative in exploring combinations of services and alternate settings. Discharge planners were not very successful in counseling families to accept the idea of discharging the resident. Finally, they believed that although the discharge planners were monitoring discharged residents, they often left to the research team nurses the judgment of whether the resident required additional or alternative services. These points are clearly supported by the data presented above. About one-third of the discharge plans prescribed only one service and there was a clear reliance on institutional settings for most of the discharges.

However, the research team nurses also believed that the discharge goal had an impact on some facilities' decisions to discharge a particular resident. Specifically, they felt that there were residents successfully discharged who otherwise would not have been because of barriers which needed to be overcome. Instead of accepting these barriers, the incentive payment system resulted in some facilities examining barriers and finding ways to overcome them.

This more positive view also is supported by the data. The limited comparisons that can be made to the discharge patterns in the control facilities suggest that the incentive payment did encourage the experimental facilities to follow through on getting appropriate discharge candidates released to a lower level of care. The 33 successes were 31.1 percent of the patients in the experimental facilities who had been nominated, approved, and assessed in the discharge process. This compares favorably to the 22.7 percent rate of success in the control facilities, which count all discharges to a lower level of care as "successful" even though we do not know if they stayed at the lower level for 90 days or more.

It appears that the study requirements for discharge planning and implementation were a barrier to participation. Fewer than half of the patients nominated and approved for the discharge process actually were given a plan. There also were a number of residents eligible for the discharge goal who were discharged to a lower level of care, although the facility did not nominate them for the discharge goal. This result can be attributed, in part, to the reluctance of the facility staff to set a goal which might not be achieved, to the resistance of some staff members to complete the required paperwork, and to the perception of the facility staff that the process was too complex.

For patients discharged to a lower level of care institution, the planning, implementation, and follow up was relatively straightforward. Consequently, the financial risk is less and the reward is greater. This may explain why discharges to intermediate care facilities and board and care facilities were so prevalent. The fact that most discharges were to such settings is not surprising when we consider that the vast majority of those discharged had been in the facility for more than 90 days. Such long-stay patients, if they can leave the facility at all, are much more likely to do so only if a comparable sheltered environment is available. Because long-stay Medicaid patients often do not have a home to return to, or the financial resources to afford necessary home care services, or the family to provide continual supervision, their discharge to an intermediate care facility or board and care home is a logical choice.

The results provide several important findings concerning the timing of discharges. Discharges to lower levels of care can be successful for patients who have been institutionalized for an extended period. Even those patients with plans who had been institutionalized for a year or more had a success rate of 52.6 percent. The success rate, however, was much higher for those patients discharged earlier. The rate was 81.8 percent for those with a stay of less than 180 days, and 71.4 percent for those with a stay of 180 to 365 days. Apparently, the longer the time between admission and discharge planning, the less effective the process becomes.

References

1. Rossen, S. Adapting discharge planning to prospective pricing. *Hospitals*, 58(5):71-79, 1984.

2. Meiners, M.R., R.M. Coffey. Hospital DRGs and the need for long-term care services: an empirical analysis. *Health Services Research*, 20(3):359-384, 1985.

3. Johnston, J.K., C.H. Kurland, K. Reisberg. New Jersey long term care discharge planning. *Home Health Care Services Quarterly*, 5(1):35-44, 1984.

4. Weissert, W.G., W.J. Scanlon, T.H. Wan, D.E. Skinner. Care for the chronically ill: nursing home incentive payment experiment. *Health Care Financing Review*, 5(2):41-49, 1983.

5. Meiners, M.R., P. Thorburn, P.C. Roddy, B.J. Jones. *Nursing Home Admissions: The Results of an Incentive Reimbursement Experiment*, Long-Term Care Studies Program Research Report, DHHS Publication No. (PHS) 86-3397. U.S. Department of Health and Human Services, National Center for Health Services Research and Health Care Technology Assessment, October 1985.

6. Thorburn, P., M.R. Meiners. *Nursing Home Patient Outcomes: The Results of an Incentive Reimbursement Experiment*, Long-Term Care Studies Program Research Report, DHHS Publication No. (PHS) 86-3400. U.S. Department of Health and Human Services, National Center for Health Services Research and Health Care Technology Assessment, January 1986.

7. Meiners, M.R., G.D. Heinemann, B.J. Jones. *An evaluation of nursing home payments designed to encourage appropriate care for the chronically ill: Some preliminary findings*. Paper presented at the annual meeting of the American Economic Association, December 1982.

8. Applied Management Sciences, Inc. *A Controlled Experiment to Evaluate the Impacts of Incentive Payments on Nursing Home Admissions, Discharges, Case Mix, Care, Outcomes, and Costs: Documentation Report*, contract 233-79-3019. U.S. Department of Health and Human Services, National Center for Health Services Research and Health Care Technology Assessment, February 1986. (National Technical Information Service report PB86-225554, available as a separate report, as well as with data tapes and related materials; see note on page 2.)

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